



An AVCJ Overview of Clean Technology Investments in Asia

A Briefing by

Asian Venture Capital Journal / Private Equity Asia

Cleantech's global position in venture capital

- Now third largest venture capital category worldwide, with over 10% of total VC investment in North America, EU, Asia
 - Cleantech now accounts for 17% of VC funding in US
- May be biggest job & wealth creation opportunity of 21st century
- Next and necessary wave of technological innovation

Cleantech's approach

- Cleantech utilizes knowledge-based technologies, products and services to:
 - Optimize use of natural resources
 - Reduce ecological impact
 - Add economic value

Cleantech: Asian and global support

 = Significant firms in Asia

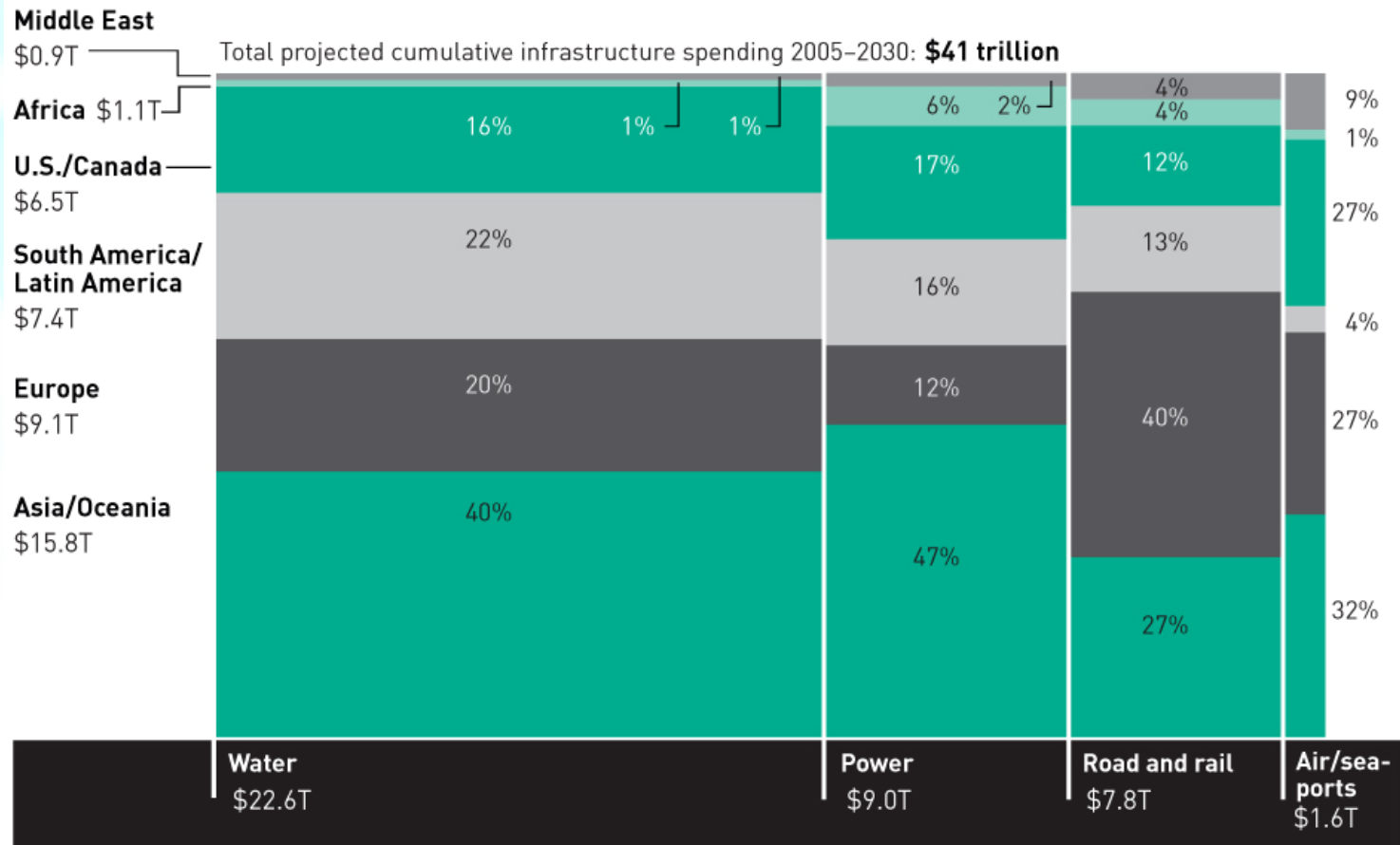


China's environmental burden

- PRC spent over \$84.5 billion on environmental protection 2001-05, or 1.3%+ of GDP
- World Bank estimates direct damage from air pollution in PRC at 8-12% of \$1.4 trillion GDP
- PRC environmental burden impacts
 - National health standards
 - Economic growth
 - Social stability and harmony

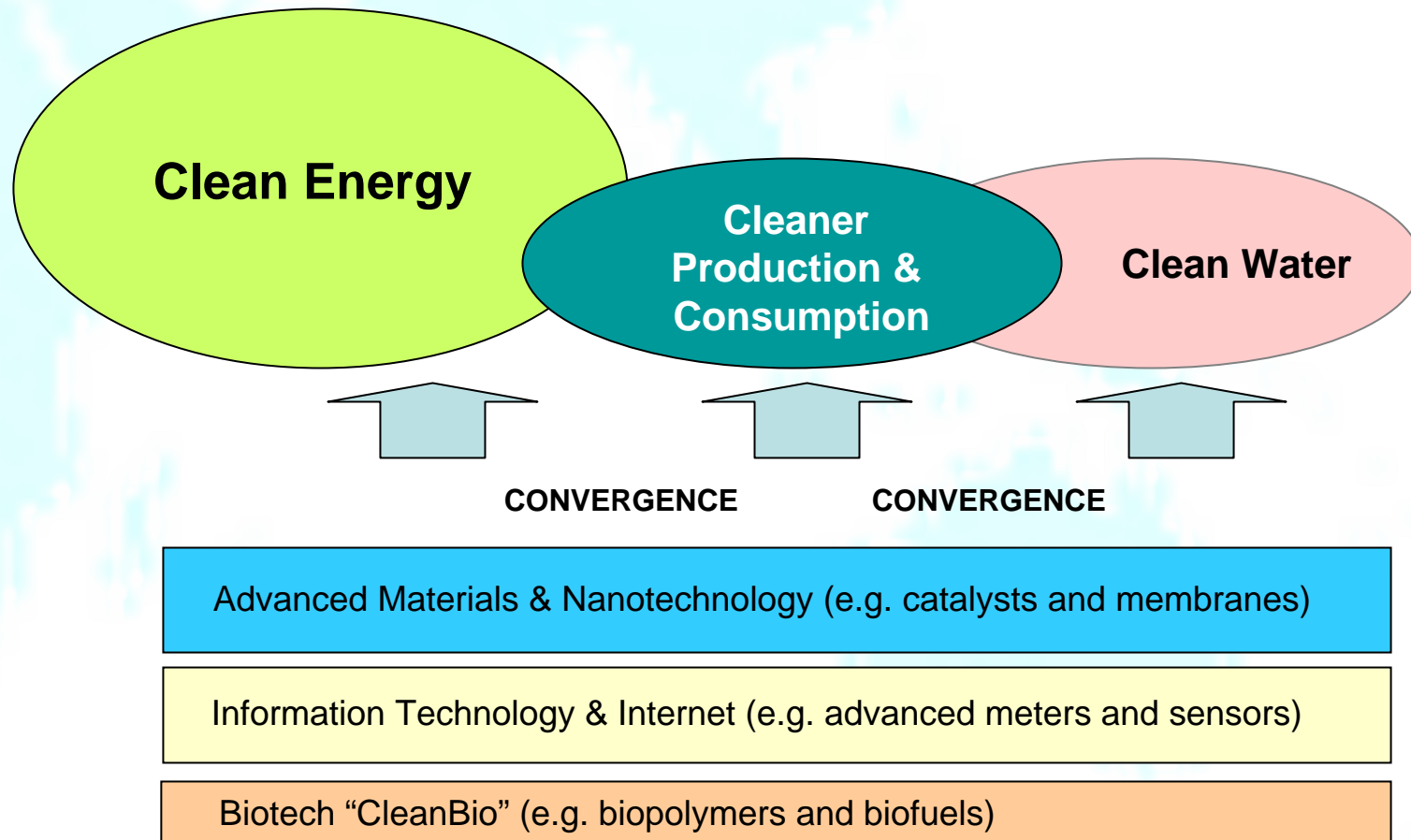
Cleantech and infrastructure

Asia/Oceania needs \$15.8 trillion infrastructure investment – largest global total



Source: Booz Allen Hamilton, Global Infrastructure Partners, World Energy Outlook, Organisation for Economic Co-operation and Development (OECD), Boeing, Drewry Shipping Consultants, U.S. Department of Transportation

Cleantech: Technology convergence

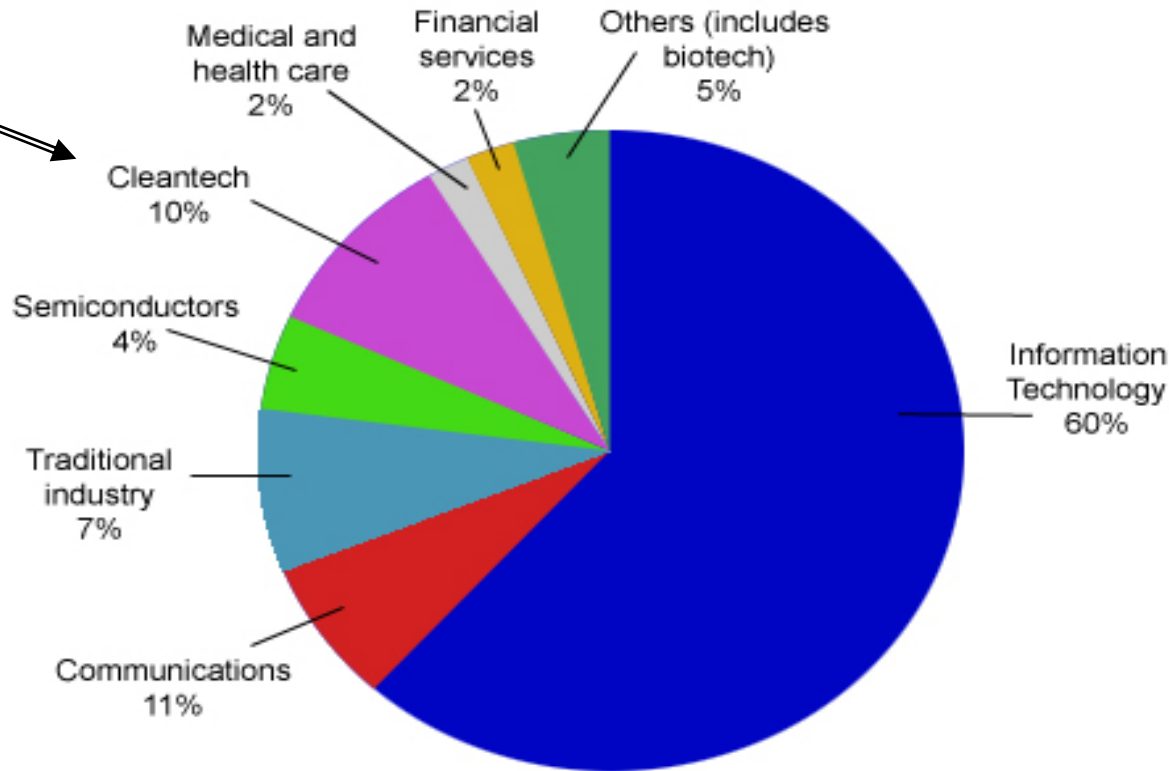


Cleantech: Growing Asian investment

- Asia Pacific sees \$8.4 billion of wind power investments in 2007
 - Fastest growing wind power investment region worldwide
- China accounts for most of \$7.1 billion in biomass investment in 2007
 - 50%+ rise in biomass investment since 2006

Cleantech in China VC industry

Cleantech Is China's Third Largest Area of Venture Capital



* Does not total 100 due to rounding

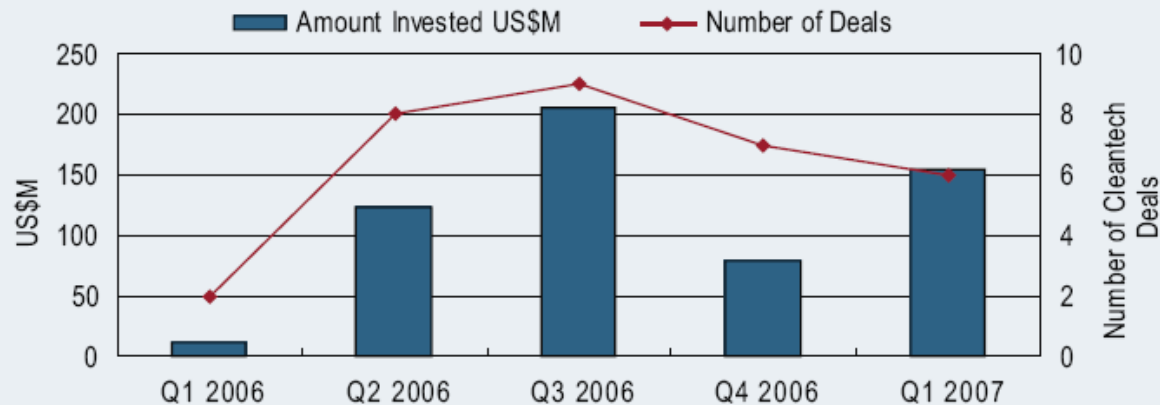
PRC Cleantech investing 2006-Q107

Fig. 1: Cleantech Investment Deals and Amounts

Quarter	Number of Deals	Amount (US\$M)	Average (US\$M)	Median Size (US\$M)
Q1 2006	2	11.00	5.50	5.50
Q2 2006	8	123.70	15.47	12.65
Q3 2006	9	205.70	22.86	15.40
Q4 2006	7	79.60	11.37	12.65
Q1 2007	6	154.00	25.67	22.00
Total	32	574.00		

Source: Cleantech Network™

Fig 2: Cleantech Venture Investments by Quarter



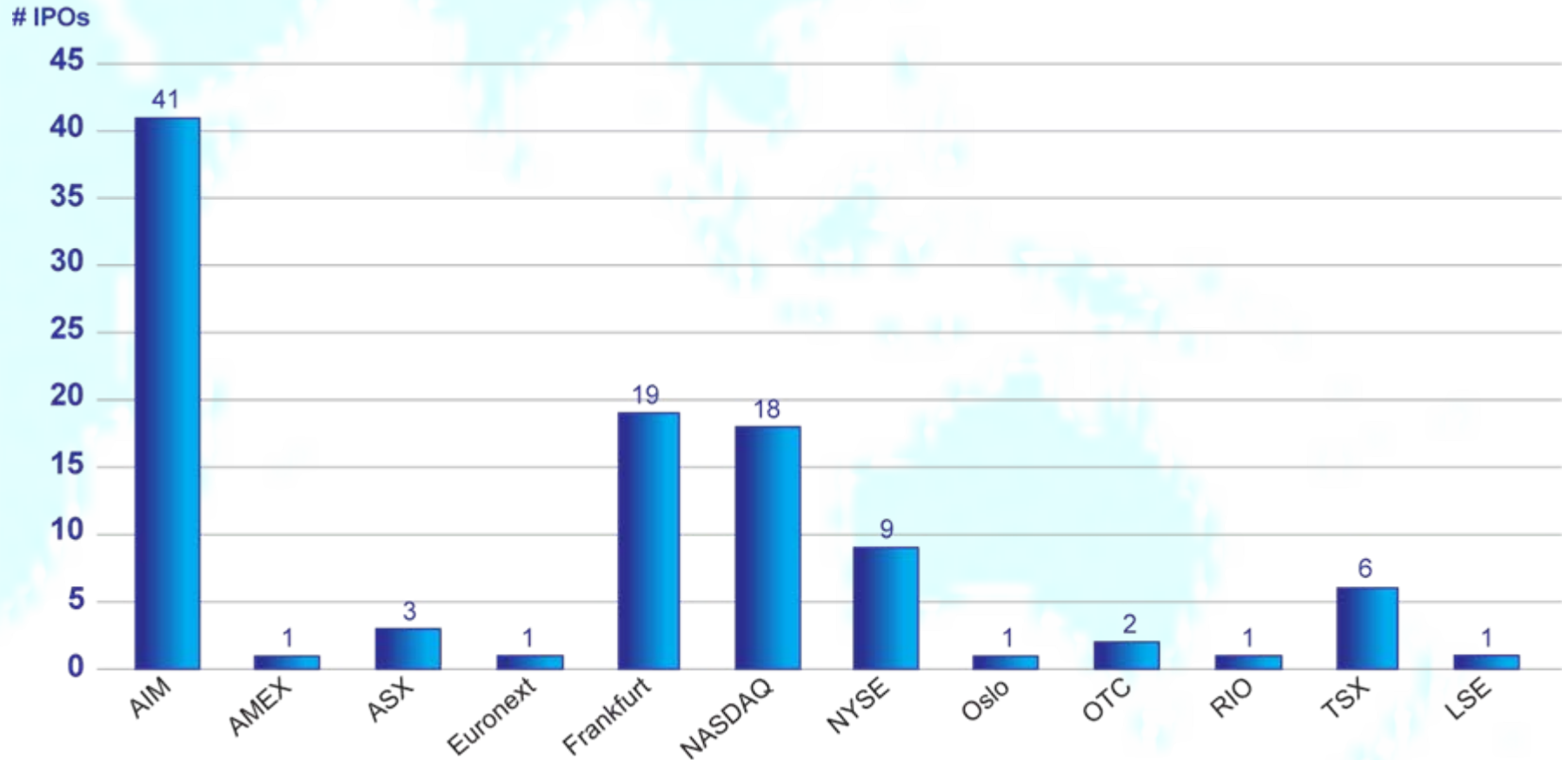
Source: Cleantech Network™

Cleantech: Other promising Asian VC markets

- India
 - Environmental improvement
 - Wind power
- Southeast Asia (Malaysia, Thailand, Indonesia)
 - Palm oil for biofuels

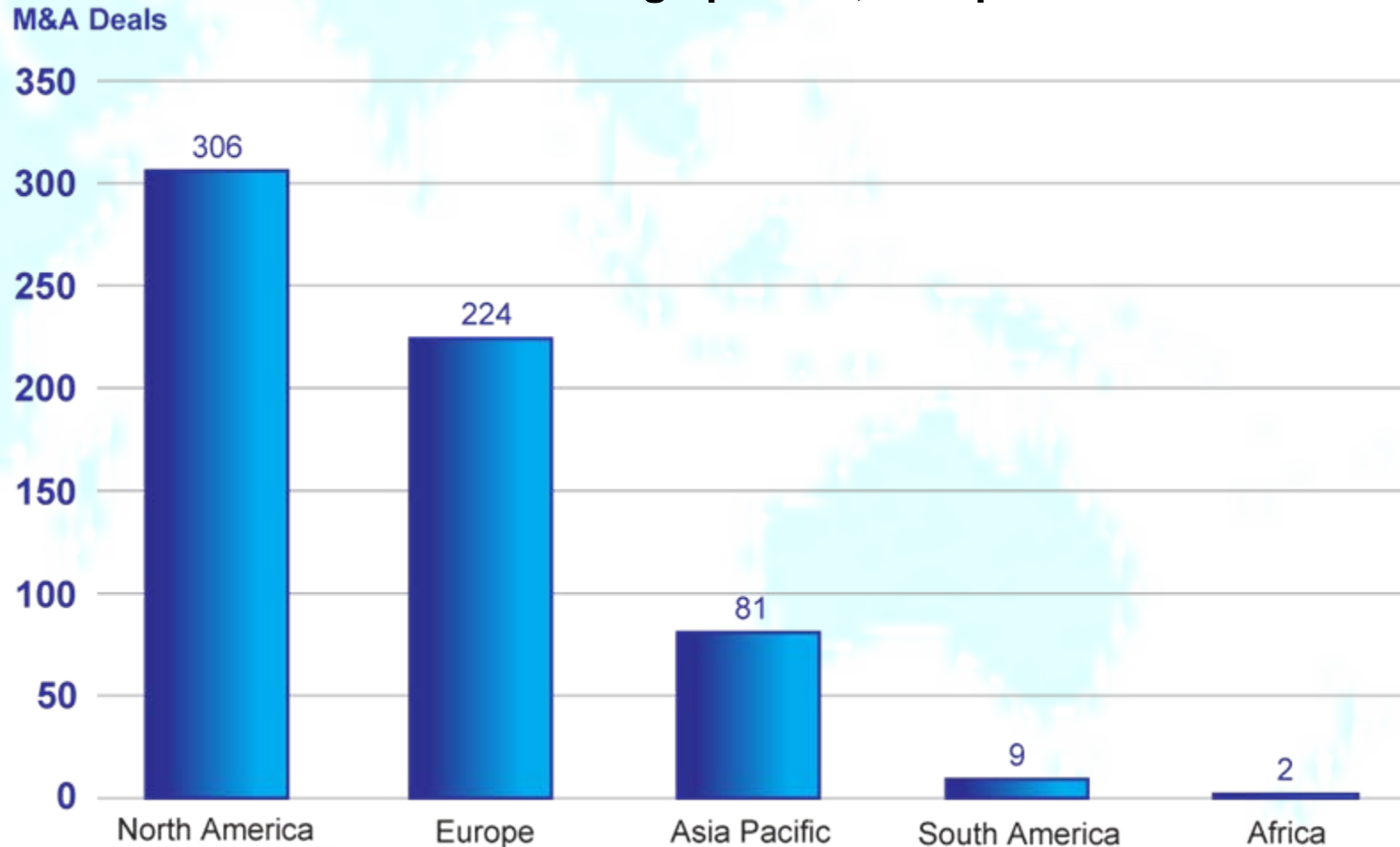
Global Cleantech IPOs 2005-Q207

PRC solar firms make up bulk of \$5.8bn raised on global exchanges in 2007



Global Cleantech M&A 2005-Q207

Asia catching up to US, Europe



Representative deal: SunTech Power Holdings

- PRC company leveraging traditional semiconductor technology into solar power
- Invested by Actis China, DragonTech Ventures, Goldman Sachs
- Top tech IPO of 2005
 - 34% share hike on first day
 - \$396 million raised
- First ever Chinese IPO on NYSE
- “Exit of the Year”, Asian Private Equity & Venture Capital Awards 2006



Representative Deal: Wuhan Kaidi

- CCMP Capital Asia takes 70% stake in Wuhan Kaidi Electric Power Environment Protection for \$35.7 million
- Top manufacturer of desulphurization equipment to clean emissions from thermal power stations
- “They’re moving into green energy. It’s a very hot and new area for them, and they need the money for that ... It’s one of those rare deals in China you can do a buyout and both sides are happy” – *AVCJ* source

Representative opinions from Asia

- “You don’t even need to look at fringe investments like solar power to see that there are already enormously profitable technologies ... It’s a misconception that environmental technology and techniques are fringe technology when in actual fact a lot of it is already very mainstream”
 - Rob Morrison, CEO, Credit Lyonnais Securities Asia

Conclusion: Trends for Asia in 2008

- Cleantech investment likely to continue rise
- PRC likely to dominate regional cleantech
- Developments driven by:
 - Existing environmental deficit in PRC, elsewhere
 - Infrastructure shortfall in developing economies
 - Western investment groups looking beyond “mature” Western cleantech markets
 - Competition in “traditional” VC sectors
 - Huge monetary opportunities

Thank You!

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Charts: Cleantech Group LLC